

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Patent Application of : Group Art Unit: Not Yet Assigned  
 Seung-Ho OH :  
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 Conf No.: Not Yet Assigned :  
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 Appln. No.: Not Yet Assigned : Examiner:  
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 Filed: Herewith :  
 : Attorney Docket  
 For: METHOD AND APPARATUS FOR : No. 10061-28US  
 DETECTING STEREO DISPARITY IN : (PO2001-11US)  
 SEQUENTIAL PARALLEL :  
 PROCESSING MODE :

**PRELIMINARY AMENDMENT**

Simultaneously with the filing of the above-identified application with which this Preliminary Amendment is being filed, and prior to the calculation of the filing fee, Applicant hereby amends the application as follows, without prejudice:

**In the Claims:**

Please amend claim 3 as follows:

At page 23, please replace claim 3 as follows (a marked-up copy of page 23 is enclosed and shows the changes made):

-- 3. The apparatus according to Claim 1, characterized in that said strip-processing unit comprises a plurality of S-units connected in parallel with each other, and brightness data of the matched scanning columns less than the number of said S-units can be inputted to a first S-unit and sequentially shifted to the next S-unit up to the last S-unit, and wherein said S-units calculate the similarity of each matched scanning column with respect to the reference column using differential brightness of pixels.--

**REMARKS**

Claims 1 to 12 are pending in the application.

The purpose of this amendment is to place the claims in appropriate U.S. form and delete the multiple dependent claims in this application, and thereby eliminate excessive claim fees. Such amendments are formal in nature and no new matter is added by any of the

above amendments. Entry of this amendment and early examination of this application are respectfully solicited.

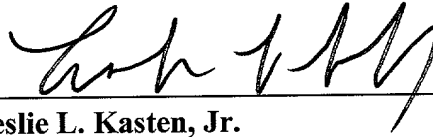
Respectfully submitted,

**SEUNG-HO OH**

6/21/01

(Date)

By: \_\_\_\_\_



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calculated by said WMC-unit and the similarities of the matched scanning columns stored in said S-buffer.

3. The apparatus according to Claim 1 ~~or 2~~, characterized in that  
5 said strip-processing unit comprises a plurality of S-units connected in parallel with each other, and brightness data of the matched scanning columns less than the number of said S-units can be inputted to a first S-unit and sequentially shifted to the next S-unit up to the last S-unit, and wherein said S-units calculate the similarity of each matched scanning column with respect to the reference column using differential brightness of  
10 pixels.

4. The apparatus according to Claim 3, characterized in that said first S-unit comprises:

a serial/parallel converter for converting serial brightness data of pixels  
15 on the matched scanning column into parallel data output to the next S-unit;

a differential-brightness processing unit for obtaining differential brightness of pixels between the matched scanning column and the reference column;

a comparator for comparing the differential brightness of pixels obtained by said differential-brightness processing unit to a threshold value;

20 an adder for accumulating outputs of pixels from said comparator; and  
a D-flip-flop for buffering outputs from said adder into said S-buffer.

5. The apparatus according to Claim 3, characterized in that each of said S-units other than said first S-unit comprises:

25 a parallel/serial converter for converting parallel brightness data of pixels of the matched scanning column into serial data output to the next S-unit;

a differential-brightness processing unit for obtaining differential brightness of pixels between the matched scanning column and the reference column;

30 a comparator for comparing the differential brightness of pixels obtained by said differential-brightness processing unit to a threshold value;